

**In the Sequence Listing:**

Please replace the current sequence listing with the attached sequence listing (164 pages).



SEQUENCE LISTING

RECEIVED  
MAR 10 2003  
TECHCENTER 1600/2900

<110> BRIDON, Dominique P.  
DUFRESNE, Robert S.  
BOUDJELLAB, Nissab  
ROBITAILLE, Martin  
MILNER, Peter G.

<120> LONG LASTING FUSION PEPTIDE INHIBITORS OF VIRAL  
INFECTION

<130> REDC-1511 USA

<140> US 09/657,336

<141> 2000-09-07

<150> US 60/153,406

<151> 1999-09-10

<160> 545

<170> PatentIn Ver. 2.1

<210> 1

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 1

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn Trp Phe  
35

<210> 2

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 2

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu

20

25

30

Arg Tyr Leu Lys Asp Gln  
35

<210> 3  
<211> 36  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 3

Tyr Thr Asn Thr Ile Tyr Thr Leu Leu Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn Trp Phe  
35

<210> 4  
<211> 36  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 4

Tyr Thr Gly Ile Ile Tyr Asn Leu Leu Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Asn Leu  
20 25 30

Trp Asn Trp Phe  
35

<210> 5  
<211> 36  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 5

Tyr Thr Ser Leu Ile Tyr Ser Leu Leu Glu Lys Ser Gln Thr Gln Gln

1                      5                      10                      15  
 Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
                     20                      25                      30

Trp Asn Trp Phe  
                     35

<210> 6  
 <211> 36  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
                     peptide

<400> 6  
 Leu Glu Ala Asn Ile Ser Lys Ser Leu Glu Gln Ala Gln Ile Gln Gln  
   1                      5                      10                      15

Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Ile Phe  
                     20                      25                      30

Gly Asn Trp Phe  
                     35

<210> 7  
 <211> 36  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
                     peptide

<400> 7  
 Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
   1                      5                      10                      15

Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe  
                     20                      25                      30

Thr Asn Trp Leu  
                     35

<210> 8  
 <211> 41  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
                     peptide

<400> 8

Cys Gly Gly Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu  
1 5 10 15

Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu  
20 25 30

Ala Val Glu Arg Tyr Leu Lys Asp Gln  
35 40

<210> 9

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 9

Gln Gln Leu Leu Asp Val Val Lys Arg Gln Gln Glu Met Leu Arg Leu  
1 5 10 15

Thr Val Trp Gly Thr Lys Asn Leu Gln Ala Arg Val Thr Ala Ile Glu  
20 25 30

Lys Tyr Leu Lys Asp Gln  
35

<210> 10

<211> 46

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 10

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr  
20 25 30

Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
35 40 45

<210> 11

<211> 54

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 11

Ala Ser Gly Val Ala Val Ser Lys Val Leu His Leu Glu Gly Glu Val  
1 5 10 15

Asn Lys Ile Ala Leu Leu Ser Thr Asn Lys Ala Val Val Ser Leu Ser  
20 25 30

Asn Gly Val Ser Val Leu Thr Ser Lys Val Leu Asp Leu Lys Asn Tyr  
35 40 45

Ile Asp Lys Gln Leu Leu  
50

<210> 12

<211> 53

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: synthetic peptide

<400> 12

Gly Glu Pro Ile Ile Asn Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp  
1 5 10 15

Glu Phe Asp Ala Ser Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser  
20 25 30

Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu His Asn Val Asn Ala  
35 40 45

Gly Lys Ser Thr Thr  
50

<210> 13

<211> 48

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 13

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
35 40 45

<210> 14  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 14  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys  
20 25 30

Tyr Lys

<210> 15  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 15  
Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys Cys  
1 5 10 15

Asn Gly Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr  
20 25 30

Lys Asn

<210> 16  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 16

Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys Cys Asn Gly  
1 5 10 15

Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn  
20 25 30

Ala Val

<210> 17

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 17

Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys Met Asn Gly  
1 5 10 15

Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn  
20 25 30

Ala Val

<210> 18

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 18

Val Ala Val Ser Lys Val Leu His Leu Glu Gly Glu Val Asn Lys Ile  
1 5 10 15

Ala Leu Leu Ser Thr Asn Lys Ala Val Val Ser Leu Ser Asn Gly Val  
20 25 30

Ser

<210> 19

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic



peptide

<400> 19

Ala Val Ser Lys Val Leu His Leu Glu Gly Glu Val Asn Lys Ile Ala  
1 5 10 15

Leu Leu Ser Thr Asn Lys Ala Val Val Ser Leu Ser Asn Gly Val Ser  
20 25 30

Val

<210> 20

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 20

Val Ser Lys Val Leu His Leu Glu Gly Glu Val Asn Lys Ile Ala Leu  
1 5 10 15

Leu Ser Thr Asn Lys Ala Val Val Ser Leu Ser Asn Gly Val Ser Val  
20 25 30

Leu

<210> 21

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 21

Ser Lys Val Leu His Leu Glu Gly Glu Val Asn Lys Ile Ala Leu Leu  
1 5 10 15

Ser Thr Asn Lys Ala Val Val Ser Leu Ser Asn Gly Val Ser Val Leu  
20 25 30

Thr

<210> 22

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 22

Lys Val Leu His Leu Glu Gly Glu Val Asn Lys Ile Ala Leu Leu Ser  
1 5 10 15

Thr Asn Lys Ala Val Val Ser Leu Ser Asn Gly Val Ser Val Leu Thr  
20 25 30

Ser

<210> 23

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 23

Leu Glu Gly Glu Val Asn Lys Ile Ala Leu Leu Ser Thr Asn Lys Ala  
1 5 10 15

Val Val Ser Leu Ser Asn Gly Val Ser Val Leu Thr Ser Lys Val Leu  
20 25 30

Asp

<210> 24

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 24

Gly Glu Val Asn Lys Ile Ala Leu Leu Ser Thr Asn Lys Ala Val Val  
1 5 10 15

Ser Leu Ser Asn Gly Val Ser Val Leu Thr Ser Lys Val Leu Asp Leu  
20 25 30

Lys

<210> 25

<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 25  
Glu Val Asn Lys Ile Ala Leu Leu Ser Thr Asn Lys Ala Val Val Ser  
1 5 10 15

Leu Ser Asn Gly Val Ser Val Leu Thr Ser Lys Val Leu Asp Leu Lys  
20 25 30

Asn

<210> 26  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 26  
Val Asn Lys Ile Ala Leu Leu Ser Thr Asn Lys Ala Val Val Ser Leu  
1 5 10 15

Ser Asn Gly Val Ser Val Leu Thr Ser Lys Val Leu Asp Leu Lys Asn  
20 25 30

Tyr

<210> 27  
<211> 33  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 27  
Asn Lys Ile Ala Leu Leu Ser Thr Asn Lys Ala Val Val Ser Leu Ser  
1 5 10 15

Asn Gly Val Ser Val Leu Thr Ser Lys Val Leu Asp Leu Lys Asn Tyr  
20 25 30

Ile

<210> 28  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 28  
Lys Ile Ala Leu Leu Ser Thr Asn Lys Ala Val Val Ser Leu Ser Asn  
1 5 10 15  
Gly Val Ser Val Leu Thr Ser Lys Val Leu Asp Leu Lys Asn Tyr Ile  
20 25 30

Asp

<210> 29  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 29  
Ile Ala Leu Leu Ser Thr Asn Lys Ala Val Val Ser Leu Ser Asn Gly  
1 5 10 15  
Val Ser Val Leu Thr Ser Lys Val Leu Asp Leu Lys Asn Tyr Ile Asp  
20 25 30

Lys

<210> 30  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 30  
Ala Leu Leu Ser Thr Asn Lys Ala Val Val Ser Leu Ser Asn Gly Val  
1 5 10 15  
Ser Val Leu Thr Ser Lys Val Leu Asp Leu Lys Asn Tyr Ile Asp Lys  
20 25 30

Gln

<210> 31  
<211> 70  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 31  
Gly Thr Ile Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala  
1 5 10 15  
Val Ala Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu  
20 25 30  
Lys Glu Ala Ile Arg Asp Thr Asn Lys Ala Val Gln Ser Val Gln Ser  
35 40 45  
Ser Ile Gly Asn Leu Ile Val Ala Ile Lys Ser Val Gln Asp Tyr Val  
50 55 60  
Asn Lys Glu Ile Val Pro  
65 70

<210> 32  
<211> 56  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 32  
Tyr Thr Pro Asn Asp Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro  
1 5 10 15  
Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu  
20 25 30  
Ser Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys Leu Asp Ser Ile Gly  
35 40 45  
Asn Trp His Gln Ser Ser Thr Thr  
50 55

<210> 33  
<211> 35  
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 33

Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu  
1 5 10 15

Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg  
20 25 30

Arg Ser Asn  
35

<210> 34

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 34

Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu  
1 5 10 15

Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg  
20 25 30

Ser Asn Gln  
35

<210> 35

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 35

Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn  
1 5 10 15

Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
20 25 30

Asn Gln Lys  
35

<210> 36  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 36  
Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys  
1 5 10 15  
Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser Asn  
20 25 30  
Gln Lys Leu  
35

<210> 37  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 37  
Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala  
1 5 10 15  
Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser Asn Gln  
20 25 30  
Lys Leu Asp  
35

<210> 38  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 38  
Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys  
1 5 10 15  
Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys  
20 25 30  
Leu Asp Ser

<210> 39  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 39  
 Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser  
   1                  5                  10                  15  
 Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys Leu  
                   20                  25                  30  
 Asp Ser Ile  
           35

<210> 40  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
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 peptide

<400> 40  
 Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp  
   1                  5                  10                  15  
 Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys Leu Asp  
                   20                  25                  30  
 Ser Ile Gly  
           35

<210> 41  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
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 peptide

<400> 41  
 Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu  
   1                  5                  10                  15  
 Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys Leu Asp Ser



20

25

30

Ile Gly Asn  
35

<210> 42  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 42  
Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu  
1 5 10 15

Glu Ser Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys Leu Asp Ser Ile  
20 25 30

Gly Asn Trp  
35

<210> 43  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 43  
Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu  
1 5 10 15

Ser Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys Leu Asp Ser Ile Gly  
20 25 30

Asn Trp His  
35

<210> 44  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 44  
Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser

1                      5                      10                      15  
 Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys Leu Asp Ser Ile Gly Asn  
                     20                      25                      30

Trp His Gln  
                     35

<210> 45  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
                     peptide

<400> 45  
 Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys  
   1                      5                      10                      15

Glu Trp Ile Arg Arg Ser Asn Gln Lys Leu Asp Ser Ile Gly Asn Trp  
                     20                      25                      30

His Gln Ser  
                     35

<210> 46  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
                     peptide

<400> 46  
 Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu  
   1                      5                      10                      15

Trp Ile Arg Arg Ser Asn Gln Lys Leu Asp Ser Ile Gly Asn Trp His  
                     20                      25                      30

Gln Ser Ser  
                     35

<210> 47  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
                     peptide

<400> 47

Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp  
1 5 10 15

Ile Arg Arg Ser Asn Gln Lys Leu Asp Ser Ile Gly Asn Trp His Gln  
20 25 30

Ser Ser Thr  
35

<210> 48

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 48

Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile  
1 5 10 15

Arg Arg Ser Asn Gln Lys Leu Asp Ser Ile Gly Asn Trp His Gln Ser  
20 25 30

Ser Thr Thr  
35

<210> 49

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 49

Thr Ala Ala Val Ala Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile  
1 5 10 15

Glu Lys Leu Lys Glu Ala Ile Arg Asp Thr Asn Lys Ala Val Gln Ser  
20 25 30

Val Gln Ser  
35

<210> 50

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 50

Ala Val Ala Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys  
1 5 10 15

Leu Lys Glu Ala Ile Arg Asp Thr Asn Lys Ala Val Gln Ser Val Gln  
20 25 30

Ser Ser Ile  
35

<210> 51

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 51

Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu  
1 5 10 15

Ala Ile Arg Asp Thr Asn Lys Ala Val Gln Ser Val Gln Ser Ser Ile  
20 25 30

Gly Asn Leu  
35

<210> 52

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 52

Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala  
1 5 10 15

Ile Arg Asp Thr Asn Lys Ala Val Gln Ser Val Gln Ser Ser Ile Gly  
20 25 30

Asn Leu Ile  
35

<210> 53

<211> 35

<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 53

Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile  
1 5 10 15

Arg Asp Thr Asn Lys Ala Val Gln Ser Val Gln Ser Ser Ile Gly Asn  
20 25 30

Leu Ile Val  
35

<210> 54

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 54

Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg  
1 5 10 15

Asp Thr Asn Lys Ala Val Gln Ser Val Gln Ser Ser Ile Gly Asn Leu  
20 25 30

Ile Val Ala  
35

<210> 55

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 55

Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
1 5 10 15

Thr Asn Lys Ala Val Gln Ser Val Gln Ser Ser Ile Gly Asn Leu Ile  
20 25 30

Val Ala Ile  
35

<210> 56  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 56  
Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp Thr  
1 5 10 15  
Asn Lys Ala Val Gln Ser Val Gln Ser Ser Ile Gly Asn Leu Ile Val  
20 25 30  
Ala Ile Lys  
35

<210> 57  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 57  
Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp Thr Asn  
1 5 10 15  
Lys Ala Val Gln Ser Val Gln Ser Ser Ile Gly Asn Leu Ile Val Ala  
20 25 30  
Ile Lys Ser  
35

<210> 58  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 58  
Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp Thr Asn Lys  
1 5 10 15  
Ala Val Gln Ser Val Gln Ser Ser Ile Gly Asn Leu Ile Val Ala Ile  
20 25 30

Lys Ser Val  
35

<210> 59  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 59  
Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp Thr Asn Lys Ala  
1 5 10 15

Val Gln Ser Val Gln Ser Ser Ile Gly Asn Leu Ile Val Ala Ile Lys  
20 25 30

Ser Val Gln  
35

<210> 60  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 60  
Lys Leu Lys Glu Ala Ile Arg Asp Thr Asn Lys Ala Val Gln Ser Val  
1 5 10 15

Gln Ser Ser Ile Gly Asn Leu Ile Val Ala Ile Lys Ser Val Gln Asp  
20 25 30

Tyr Val Asn  
35

<210> 61  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 61  
Leu Lys Glu Ala Ile Arg Asp Thr Asn Lys Ala Val Gln Ser Val Gln  
1 5 10 15

Ser Ser Ile Gly Asn Leu Ile Val Ala Ile Lys Ser Val Gln Asp Tyr  
20 25 30

Val Asn Lys  
35

<210> 62  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 62  
Ala Ile Arg Asp Thr Asn Lys Ala Val Gln Ser Val Gln Ser Ser Ile  
1 5 10 15

Gly Asn Leu Ile Val Ala Ile Lys Ser Val Gln Asp Tyr Val Asn Lys  
20 25 30

Glu Ile Val  
35

<210> 63  
<211> 47  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 63  
Thr Trp Gln Glu Trp Glu Arg Lys Val Asp Phe Leu Glu Glu Asn Ile  
1 5 10 15

Thr Ala Leu Leu Glu Glu Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr  
20 25 30

Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe Gly Asn Trp Phe  
35 40 45

<210> 64  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 64



Trp Gln Glu Trp Glu Arg Lys Val Asp Phe Leu Glu Glu Asn Ile Thr  
 1 5 10 15

Ala Leu Leu Glu Glu Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu  
 20 25 30

Leu Gln Lys  
 35

<210> 65

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
 peptide

<400> 65

Gln Glu Trp Glu Arg Lys Val Asp Phe Leu Glu Glu Asn Ile Thr Ala  
 1 5 10 15

Leu Leu Glu Glu Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu  
 20 25 30

Gln Lys Leu  
 35

<210> 66

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
 peptide

<400> 66

Glu Trp Glu Arg Lys Val Asp Phe Leu Glu Glu Asn Ile Thr Ala Leu  
 1 5 10 15

Leu Glu Glu Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln  
 20 25 30

Lys Leu Asn  
 35

<210> 67

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic

peptide

<400> 67

Trp Glu Arg Lys Val Asp Phe Leu Glu Glu Asn Ile Thr Ala Leu Leu  
1 5 10 15

Glu Glu Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys  
20 25 30

Leu Asn Ser  
35

<210> 68

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 68

Glu Arg Lys Val Asp Phe Leu Glu Glu Asn Ile Thr Ala Leu Leu Glu  
1 5 10 15

Glu Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu  
20 25 30

Asn Ser Trp  
35

<210> 69

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 69

Arg Lys Val Asp Phe Leu Glu Glu Asn Ile Thr Ala Leu Leu Glu Glu  
1 5 10 15

Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn  
20 25 30

Ser Trp Asp  
35

<210> 70

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 70

Lys Val Asp Phe Leu Glu Glu Asn Ile Thr Ala Leu Leu Glu Glu Ala  
1 5 10 15

Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser  
20 25 30

Trp Asp Val  
35

<210> 71

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 71

Val Asp Phe Leu Glu Glu Asn Ile Thr Ala Leu Leu Glu Glu Ala Gln  
1 5 10 15

Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp  
20 25 30

Asp Val Phe  
35

<210> 72

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 72

Asp Phe Leu Glu Glu Asn Ile Thr Ala Leu Leu Glu Glu Ala Gln Ile  
1 5 10 15

Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp  
20 25 30

Val Phe Gly  
35

<210> 73

<211> 35  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
       peptide  
  
 <400> 73  
 Phe Leu Glu Glu Asn Ile Thr Ala Leu Leu Glu Glu Ala Gln Ile Gln  
   1                  5                  10                  15  
 Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val  
           20                  25                  30  
 Phe Gly Asn  
           35

<210> 74  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
       peptide  
  
 <400> 74  
 Pro Asp Ala Val Tyr Leu His Arg Ile Asp Leu Gly Pro Pro Ile Ser  
   1                  5                  10                  15  
 Leu Glu Arg Leu Asp Val Gly Thr Asn Leu Gly Asn Ala Ile Ala Lys  
           20                  25                  30  
 Leu Glu Asp  
           35

<210> 75  
 <211> 34  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
       peptide  
  
 <400> 75  
 Leu Glu Arg Leu Asp Val Gly Thr Asn Leu Gly Asn Ala Ile Ala Lys  
   1                  5                  10                  15  
 Leu Glu Ala Lys Glu Leu Leu Glu Ser Ser Asp Gln Ile Leu Arg Ser  
           20                  25                  30  
 Met Lys

<210> 76  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 76  
Leu His Arg Ile Asp Leu Gly Pro Pro Ile Ser Leu Glu Arg Leu Asp  
1 5 10 15  
Val Gly Thr Asn Leu Gly Asn Ala Ile Ala Lys Leu Glu Ala Lys Glu  
20 25 30  
Leu Leu

<210> 77  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 77  
His Arg Ile Asp Leu Gly Pro Pro Ile Ser Leu Glu Arg Leu Asp Val  
1 5 10 15  
Gly Thr Asn Leu Gly Asn Ala Ile Ala Lys Leu Glu Ala Lys Glu Leu  
20 25 30  
Leu Glu

<210> 78  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 78  
Arg Ile Asp Leu Gly Pro Pro Ile Ser Leu Glu Arg Leu Asp Val Gly  
1 5 10 15  
Thr Asn Leu Gly Asn Ala Ile Ala Lys Leu Glu Ala Lys Glu Leu Leu  
20 25 30

Glu Ser

<210> 79

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 79

Ile Asp Leu Gly Pro Pro Ile Ser Leu Glu Arg Leu Asp Val Gly Thr  
1 5 10 15

Asn Leu Gly Asn Ala Ile Ala Lys Leu Glu Ala Lys Glu Leu Leu Glu  
20 25 30

Ser Ser

<210> 80

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 80

Asp Leu Gly Pro Pro Ile Ser Leu Glu Arg Leu Asp Val Gly Thr Asn  
1 5 10 15

Leu Gly Asn Ala Ile Ala Lys Leu Glu Ala Lys Glu Leu Leu Glu Ser  
20 25 30

Ser Asp

<210> 81

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 81

Leu Gly Pro Pro Ile Ser Leu Glu Arg Leu Asp Val Gly Thr Asn Leu  
1 5 10 15

Gly Asn Ala Ile Ala Lys Leu Glu Ala Lys Glu Leu Leu Glu Ser Ser  
20 25 30

Asp Gln

<210> 82

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 82

Gly Pro Pro Ile Ser Leu Glu Arg Leu Asp Val Gly Thr Asn Leu Gly  
1 5 10 15

Asn Ala Ile Ala Lys Leu Glu Ala Lys Glu Leu Leu Glu Ser Ser Asp  
20 25 30

Gln Ile

<210> 83

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 83

Pro Pro Ile Ser Leu Glu Arg Leu Asp Val Gly Thr Asn Leu Gly Asn  
1 5 10 15

Ala Ile Ala Lys Leu Glu Ala Lys Glu Leu Leu Glu Ser Ser Asp Gln  
20 25 30

Ile Leu

<210> 84

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 84

Pro Ile Ser Leu Glu Arg Leu Asp Val Gly Thr Asn Leu Gly Asn Ala  
1 5 10 15

Ile Ala Lys Leu Glu Ala Lys Glu Leu Leu Glu Ser Ser Asp Gln Ile  
20 25 30

Leu Arg

<210> 85

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 85

Ser Leu Glu Arg Leu Asp Val Gly Thr Asn Leu Gly Asn Ala Ile Ala  
1 5 10 15

Lys Leu Glu Ala Lys Glu Leu Leu Glu Ser Ser Asp Gln Ile Leu Arg  
20 25 30

Ser Met

<210> 86

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 86

Leu Glu Arg Leu Asp Val Gly Thr Asn Leu Gly Asn Ala Ile Ala Lys  
1 5 10 15

Leu Glu Ala Lys Glu Leu Leu Glu Ser Ser Asp Gln Ile Leu Arg Ser  
20 25 30

Met Lys

<210> 87

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic



peptide

<400> 87

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn Trp  
35

<210> 88

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 88

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn

<210> 89

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 89

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp

<210> 90

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 90

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

<210> 91

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 91

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser  
20 25 30

<210> 92

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 92

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala  
20 25 30

<210> 93

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 93

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp  
20 25

<210> 94  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic.  
peptide

<400> 94  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys  
20 25

<210> 95  
<211> 27  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 95  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp  
20 25

<210> 96  
<211> 26  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 96  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu  
20 25

<210> 97

<211> 25  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 97  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu  
20 25

<210> 98  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 98  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu  
20

<210> 99  
<211> 23  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 99  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu  
20

<210> 100  
<211> 22  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic

peptide

<400> 100

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu  
20

<210> 101

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 101

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln  
20

<210> 102

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 102

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu  
20

<210> 103

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 103

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn

<210> 104  
<211> 18  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 104  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys

<210> 105  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 105  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu

<210> 106  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 106  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

<210> 107  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 107

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln  
1 5 10 15

<210> 108

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 108

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn  
1 5 10

<210> 109

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 109

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln  
1 5 10

<210> 110

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 110

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser  
1 5 10

<210> 111

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 111  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu  
1 5 10

<210> 112  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 112  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu  
1 5 10

<210> 113  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 113  
Tyr Thr Ser Leu Ile His Ser Leu Ile  
1 5

<210> 114  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 114  
Tyr Thr Ser Leu Ile His Ser Leu  
1 5

<210> 115  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 115



Tyr Thr Ser Leu Ile His Ser  
1 5

<210> 116  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 116  
Tyr Thr Ser Leu Ile His  
1 5

<210> 117  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 117  
Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15  
Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30  
Trp Asn Trp Phe  
35

<210> 118  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 118  
Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10  
Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
15 20 25 30  
Trp Asn Trp Phe

<210> 119  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 119  
Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10  
Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
15 20 25  
Trp Asn Trp Phe  
30

<210> 120  
<211> 32  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 120  
Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10  
Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
15 20 25  
Trp Asn Trp Phe  
30

<210> 121  
<211> 31  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 121  
His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10  
Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
15 20 25  
Trp Asn Trp Phe

<210> 122  
 <211> 30  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 122  
 Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
     1                    5                    10  
 Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
                     15                    20                    25  
 Trp Asn Trp Phe  
                     30

<210> 123  
 <211> 29  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 123  
 Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu  
     1                    5                    10                    15  
 Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
                     20                    25

<210> 124  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 124  
 Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu  
     1                    5                    10  
 Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
     15                    20                    25

<210> 125  
<211> 27  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 125  
Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu  
1 5 10  
Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
15 20 25

<210> 126  
<211> 26  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 126  
Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu  
1 5 10  
Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
15 20 25

<210> 127  
<211> 25  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 127  
Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu  
1 5 10  
Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
15 20 25

<210> 128  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 128

Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu  
1 5 10

Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
15 20

<210> 129

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 129

Asn Gln Gln Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys  
1 5 10 15

Trp Ala Ser Leu Trp Asn Trp Phe  
20

<210> 130

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 130

Gln Gln Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp  
1 5 10 15

Ala Ser Leu Trp Asn Trp Phe  
20

<210> 131

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 131

Gln Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala  
1 5 10 15

Ser Leu Trp Asn Trp Phe  
20

<210> 132  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 132  
Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser  
1 5 10 15

Leu Trp Asn Trp Phe  
20

<210> 133  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 133  
Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
1 5 10 15

Trp Asn Trp Phe

<210> 134  
<211> 18  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 134  
Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser  
1 5 10

Leu Trp Asn Trp Phe  
15

<210> 135  
<211> 17

<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 135

Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser  
1 5 10

Leu Trp Asn Trp Phe  
15

<210> 136

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 136

Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
1 5 10 15

<210> 137

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 137

Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
1 5 10 15

<210> 138

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 138

Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
1 5 10

<210> 139  
 <211> 13  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
       peptide  
  
 <400> 139  
 Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
   1                  5                  10  
  
 <210> 140  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
       peptide  
  
 <400> 140  
 Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
   1                  5                  10  
  
 <210> 141  
 <211> 11  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
       peptide  
  
 <400> 141  
 Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
   1                  5                  10  
  
 <210> 142  
 <211> 10  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
       peptide  
  
 <400> 142  
 Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
   1                  5                  10  
  
 <210> 143  
 <211> 9  
 <212> PRT



<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 143

Lys Trp Ala Ser Leu Trp Asn Trp Phe  
1 5

<210> 144

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 144

Trp Ala Ser Leu Trp Asn Trp Phe  
1 5

<210> 145

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 145

Ala Ser Leu Trp Asn Trp Phe  
1 5

<210> 146

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 146

Ser Leu Trp Asn Trp Phe  
1 5

<210> 147

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 147

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30  
Arg Tyr Leu Lys Asp  
35

<210> 148

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 148

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30  
Arg Tyr Leu Lys  
35

<210> 149

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 149

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30  
Arg Tyr Leu  
35

<210> 150

<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 150  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30

Arg Tyr

<210> 151  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 151  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30

Arg

<210> 152  
<211> 32  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 152  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30

<210> 153  
<211> 31  
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 153

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val  
20 25 30

<210> 154

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 154

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala  
20 25 30

<210> 155

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 155

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu  
20 25

<210> 156

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 156  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile  
20 25

<210> 157  
<211> 27  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 157  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg  
20 25

<210> 158  
<211> 26  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 158  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala  
20 25

<210> 159  
<211> 25  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 159  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln  
20 25

<210> 160  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 160  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gln Ile Lys Gln Leu  
20

<210> 161  
<211> 23  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 161  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gln Ile Lys Gln  
20

<210> 162  
<211> 22  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 162  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gln Ile Lys  
20

<210> 163  
<211> 21  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 163

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile  
20

<210> 164

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 164

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln  
20

<210> 165

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 165

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp

<210> 166

<211> 18

<212> .PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 166

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu

1

5

10

15

Thr Val

&lt;210&gt; 167

&lt;211&gt; 17

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: synthetic  
peptide

&lt;400&gt; 167

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu

1

5

10

15

Thr

&lt;210&gt; 168

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: synthetic  
peptide

&lt;400&gt; 168

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu

1

5

10

15

&lt;210&gt; 169

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: synthetic  
peptide

&lt;400&gt; 169

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln

1

5

10

15

&lt;210&gt; 170

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: synthetic  
peptide



<400> 170  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu  
1 5 10

<210> 171  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 171  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu  
1 5 10

<210> 172  
<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 172  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His  
1 5 10

<210> 173  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 173  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln  
1 5 10

<210> 174  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 174

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln  
1 5 10

<210> 175

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 175

Asn Asn Leu Leu Arg Ala Ile Glu Ala  
1 5

<210> 176

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 176

Asn Asn Leu Leu Arg Ala Ile Glu  
1 5

<210> 177

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 177

Asn Asn Leu Leu Arg Ala Ile  
1 5

<210> 178

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 178

Asn Asn Leu Leu Arg Ala  
1 5

<210> 179  
<211> 37  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 179  
Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30  
Arg Tyr Leu Lys Asp Gln  
35

<210> 180  
<211> 36  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 180  
Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr  
1 5 10 15  
Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30  
Arg Tyr Leu Lys Asp Gln  
35

<210> 181  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 181  
Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val  
1 5 10 15

Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg  
20 25 30

Tyr Leu Lys Asp Gln  
35

<210> 182  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 182  
Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp  
1 5 10 15

Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr  
20 25 30

Leu Lys Asp Gln

<210> 183  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 183  
Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp Gln  
1 5 10 15

Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu  
20 25 30

Lys Asp Gln

<210> 184  
<211> 32  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 184

Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp Gln Ile  
1 5 10 15

Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys  
20 25 30

Asp Gln

<210> 185

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 185

Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp Gln Ile Lys  
1 5 10 15

Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp  
20 25 30

Gln

<210> 186

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 186

Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp Gln Ile Lys Gln  
1 5 10 15

Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
20 25 30

<210> 187

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 187

Gln Gln His Leu Leu Gln Leu Thr Val Trp Gln Ile Lys Gln Leu

1	5	10	15
Gln	Ala	Arg	Ile
Leu	Ala	Val	Glu
Arg	Tyr	Leu	Lys
Asp	Gln		
20	25		

<210> 188  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 188
Gln His Leu Leu Gln Leu Thr Val Trp Gln Ile Lys Gln Leu Gln
1 5 10 15

Ala	Arg	Ile	Leu	Ala	Val	Glu	Arg	Tyr	Leu	Lys	Asp	Gln
20	25											

<210> 189  
 <211> 27  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 189
His Leu Leu Gln Leu Thr Val Trp Gln Ile Lys Gln Leu Gln Ala
1 5 10 15

Arg	Ile	Leu	Ala	Val	Glu	Arg	Tyr	Leu	Lys	Asp	Gln
20	25										

<210> 190  
 <211> 26  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 190
Leu Leu Gln Leu Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg
1 5 10 15

Ile	Leu	Ala	Val	Glu	Arg	Tyr	Leu	Lys	Asp	Gln
20	25									

<210> 191  
<211> 25  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 191  
Leu Gln Leu Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile  
1 5 10 15  
Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
20 25

<210> 192  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 192  
Gln Leu Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu  
1 5 10 15  
Ala Val Glu Arg Tyr Leu Lys Asp Gln  
20

<210> 193  
<211> 23  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 193  
Leu Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala  
1 5 10 15  
Val Glu Arg Tyr Leu Lys Asp Gln  
20

<210> 194  
<211> 22  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 194

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val  
1 5 10 15

Glu Arg Tyr Leu Lys Asp Gln  
20

<210> 195

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 195

Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
1 5 10 15

Arg Tyr Leu Lys Asp Gln  
20

<210> 196

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 196

Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg  
1 5 10 15

Tyr Leu Lys Asp Gln  
20

<210> 197

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 197

Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr  
1 5 10 15



Leu Lys Asp Gln

<210> 198  
<211> 18  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 198  
Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu  
1 5 10 15

Lys Asp Gln

<210> 199  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 199  
Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys  
1 5 10 15

Asp Gln

<210> 200  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 200  
Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10 15

<210> 201  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 201

Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10 15

<210> 202

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 202

Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10

<210> 203

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 203

Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10

<210> 204

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 204

Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10

<210> 205

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic

peptide

<400> 205

Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10

<210> 206

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 206

Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10

<210> 207

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 207

Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5

<210> 208

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 208

Val Glu Arg Tyr Leu Lys Asp Gln  
1 5

<210> 209

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 209  
Glu Arg Tyr Leu Lys Asp Gln  
1 5

<210> 210  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 210  
Arg Tyr Leu Lys Asp Gln  
1 5

<210> 211  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 211  
Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe  
20 25 30

Thr Asn Trp  
35

<210> 212  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 212  
Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe  
20 25 30

Thr Asn

<210> 213  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 213  
Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15  
Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe  
20 25 30

Thr

<210> 214  
<211> 32  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 214  
Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15  
Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe  
20 25 30

<210> 215  
<211> 31  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 215  
Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15  
Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val  
20 25 30

<210> 216  
<211> 30

<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 216

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp  
20 25 30

<210> 217

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 217

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp  
20 25

<210> 218

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 218

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser  
20 25

<210> 219

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 219

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn  
20 25

<210> 220

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 220

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu  
20 25

<210> 221

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 221

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln Lys  
20 25

<210> 222

<211> 24

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 222

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln

<210> 223  
 <211> 23  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 223  
 Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
   1                  5                  10                  15  
 Glu Lys Asn Met Tyr Glu Leu  
                   20

<210> 224  
 <211> 22  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 224  
 Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
   1                  5                  10                  15  
 Glu Lys Asn Met Tyr Glu  
                   20

<210> 225  
 <211> 21  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 225  
 Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
   1                  5                  10                  15  
 Glu Lys Asn Met Tyr  
                   20

<210> 226  
 <211> 20  
 <212> PRT



<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 226

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met  
20

<210> 227

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 227

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn

<210> 228

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 228

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys

<210> 229

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 229

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln

1	5	10	15
---	---	----	----

Glu

<210> 230  
 <211> 16  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 230  
 Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
     1                    5                    10                    15

<210> 231  
 <211> 15  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 231  
 Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln  
     1                    5                    10                    15

<210> 232  
 <211> 14  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 232  
 Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile  
     1                    5                    10

<210> 233  
 <211> 13  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 233  
Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln  
1 5 10

<210> 234  
<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 234  
Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala  
1 5 10

<210> 235  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 235  
Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln  
1 5 10

<210> 236  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 236  
Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu  
1 5 10

<210> 237  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 237

Leu Glu Ala Asn Ile Ser Gln Ser Leu  
1 5

<210> 238  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 238  
Leu Glu Ala Asn Ile Ser Gln Ser  
1 5

<210> 239  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 239  
Leu Glu Ala Asn Ile Ser Gln  
1 5

<210> 240  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 240  
Leu Glu Ala Asn Ile Ser  
1 5

<210> 241  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 241  
Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln

1	5	10	15
Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe			
	20	25	30

Thr Asn Trp Leu  
35

<210> 242  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic peptide

<400> 242
Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln Glu
1 5 10 15

Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe
20 25 30

Thr Asn Trp Leu

<210> 243  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic peptide

<400> 243
Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln Glu Lys
1 5 10 15

Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe Thr
20 25 30

Asn Trp Leu

<210> 244  
<211> 32  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic peptide

<400> 244  
 Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln Glu Lys Asn  
           1                          5                          10                          15

Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe Thr Asn  
                           20                          25                          30

Trp Leu

<210> 245  
 <211> 31  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
           peptide

<400> 245  
 Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln Glu Lys Asn Met  
           1                          5                          10                          15

Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe Thr Asn Trp  
                           20                          25                          30

Leu

<210> 246  
 <211> 30  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
           peptide

<400> 246  
 Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr  
           1                          5                          10                          15

Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
                           20                          25                          30

<210> 247  
 <211> 29  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
           peptide

<400> 247

Ser Leu Glu Gln Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu  
1 5 10 15

Leu Gln Lys Leu Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
20 25

<210> 248

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 248

Leu Glu Gln Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu  
1 5 10 15

Gln Lys Leu Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
20 25

<210> 249

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 249

Glu Gln Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln  
1 5 10 15

Lys Leu Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
20 25

<210> 250

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 250

Gln Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys  
1 5 10 15

Leu Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
20 25

<210> 251  
<211> 25  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 251  
Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu  
1 5 10 15  
Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
20 25

<210> 252  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 252  
Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn  
1 5 10 15  
Ser Trp Asp Val Phe Thr Asn Trp Leu  
20

<210> 253  
<211> 23  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 253  
Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser  
1 5 10 15  
Trp Asp Val Phe Thr Asn Trp Leu  
20

<210> 254  
<211> 22  
<212> PRT  
<213> Artificial Sequence



<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 254

Gln	Gln	Glu	Lys	Asn	Met	Tyr	Glu	Leu	Gln	Lys	Leu	Asn	Ser	Trp
1				5				10					15	

Asp	Val	Phe	Thr	Asn	Trp	Leu
				20		

<210> 255

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 255

Gln	Glu	Lys	Asn	Met	Tyr	Glu	Leu	Gln	Lys	Leu	Asn	Ser	Trp	Asp
1				5				10					15	

Val	Phe	Thr	Asn	Trp	Leu
				20	

<210> 256

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 256

Glu	Lys	Asn	Met	Tyr	Glu	Leu	Gln	Lys	Leu	Asn	Ser	Trp	Asp	Val
1				5				10					15	

Phe	Thr	Asn	Trp	Leu
				20

<210> 257

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 257

Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe  
 1 5 10 15

Thr Asn Trp Leu

<210> 258  
 <211> 18  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 258  
 Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe Thr  
 1 5 10 15

Asn Trp Leu

<210> 259  
 <211> 17  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 259  
 Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe Thr Asn  
 1 5 10 15

Trp Leu

<210> 260  
 <211> 16  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 260  
 Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
 1 5 10 15

<210> 261  
 <211> 15  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 261

Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
1 5 10 15

<210> 262

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 262

Leu Gln Lys Leu Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
1 5 10

<210> 263

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 263

Gln Lys Leu Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
1 5 10

<210> 264

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 264

Lys Leu Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
1 5 10

<210> 265

<211> 11

<212> PRT

<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 265  
Leu Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
1 5 10

<210> 266  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 266  
Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
1 5 10

<210> 267  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 267  
Ser Trp Asp Val Phe Thr Asn Trp Leu  
1 5

<210> 268  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 268  
Trp Asp Val Phe Thr Asn Trp Leu  
1 5

<210> 269  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 269

Asp Val Phe Thr Asn Trp Leu  
1 5

<210> 270

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 270

Val Phe Thr Asn Trp Leu  
1 5

<210> 271

<211> 47

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 271

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser  
35 40 45

<210> 272

<211> 46

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 272

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln  
35 40 45

<210> 273  
<211> 45  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 273  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met  
35 40 45

<210> 274  
<211> 44  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 274  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu  
35 40

<210> 275  
<211> 43  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 275  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu  
35 40

<210> 276

<211> 42

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 276

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln  
35 40

<210> 277

<211> 41

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 277

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr Glu Leu  
35 40

<210> 278

<211> 40

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 278

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr Glu  
35 40

<210> 279

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 279

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr  
35

<210> 280

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 280

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val  
35

<210> 281

<211> 37

<212> PRT

<213> Artificial Sequence

<220>



<223> Description of Artificial Sequence: synthetic  
peptide

<400> 281

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala  
35

<210> 282

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 282

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn  
35

<210> 283

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 283

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys  
35

<210> 284

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 284

Tyr	Thr	Ser	Val	Ile	Thr	Ile	Glu	Leu	Ser	Asn	Ile	Lys	Glu	Asn	Lys
1				5				10					15		

Cys	Asn	Gly	Thr	Asp	Ala	Lys	Val	Lys	Leu	Ile	Lys	Gln	Glu	Leu	Asp
			20					25					30		

Lys Tyr

<210> 285

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 285

Tyr	Thr	Ser	Val	Ile	Thr	Ile	Glu	Leu	Ser	Asn	Ile	Lys	Glu	Asn	Lys
1				5				10					15		

Cys	Asn	Gly	Thr	Asp	Ala	Lys	Val	Lys	Leu	Ile	Lys	Gln	Glu	Leu	Asp
			20					25					30		

Lys

<210> 286

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 286

Tyr	Thr	Ser	Val	Ile	Thr	Ile	Glu	Leu	Ser	Asn	Ile	Lys	Glu	Asn	Lys
1				5				10					15		

Cys	Asn	Gly	Thr	Asp	Ala	Lys	Val	Lys	Leu	Ile	Lys	Gln	Glu	Leu	Asp
			20					25					30		

<210> 287

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 287

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu  
20 25 30

<210> 288

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 288

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu  
20 25 30

<210> 289

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 289

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln  
20 25

<210> 290

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 290

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys

1	5	10	15
---	---	----	----

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys  
20 25

<210> 291  
<211> 27  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic peptide

<400> 291  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile  
20 25

<210> 292  
<211> 26  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic peptide

<400> 292  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu  
20 25

<210> 293  
<211> 25  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic peptide

<400> 293  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys  
20 25

<210> 294  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 294  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15  
Cys Asn Gly Thr Asp Ala Lys Val  
20

<210> 295  
<211> 23  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 295  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15  
Cys Asn Gly Thr Asp Ala Lys  
20

<210> 296  
<211> 22  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 296  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15  
Cys Asn Gly Thr Asp Ala  
20

<210> 297  
<211> 21  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 297

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp  
20

<210> 298

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 298

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr  
20

<210> 299

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 299

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly

<210> 300

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 300

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn

<210> 301  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 301  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys

<210> 302  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 302  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

<210> 303  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 303  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn  
1 5 10 15

<210> 304  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 304

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu  
1 5 10

<210> 305  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 305  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys  
1 5 10

<210> 306  
<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 306  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile  
1 5 10

<210> 307  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 307  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn  
1 5 10

<210> 308  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 308  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser



1

5

10

<210> 309

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 309

Tyr Thr Ser Val Ile Thr Ile Glu Leu

1

5

<210> 310

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 310

Tyr Thr Ser Val Ile Thr Ile Glu

1

5

<210> 311

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 311

Tyr Thr Ser Val Ile Thr Ile

1

5

<210> 312

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 312

Tyr Thr Ser Val Ile Thr

1

5

<210> 313  
 <211> 47  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 313  
 Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
           1                  5                  10                  15  
 Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
                   20                  25                  30  
 Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
                   35                  40                  45

<210> 314  
 <211> 46  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 314  
 Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys Cys  
           1                  5                  10                  15  
 Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
                   20                  25                  30  
 Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
                   35                  40                  45

<210> 315  
 <211> 45  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 315  
 Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys Cys Asn  
           1                  5                  10                  15  
 Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys  
                   20                  25                  30

Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
                           35                          40                          45

<210> 316  
 <211> 44  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
           peptide

<400> 316  
 Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys Cys Asn Gly  
   1                  5                          10                          15  
 Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr  
                           20                          25                          30

Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
                           35                          40

<210> 317  
 <211> 43  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
           peptide

<400> 317  
 Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys Cys Asn Gly Thr  
   1                  5                          10                          15  
 Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys  
                           20                          25                          30

Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
                           35                          40

<210> 318  
 <211> 42  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
           peptide

<400> 318  
 Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys Cys Asn Gly Thr Asp  
   1                  5                          10                          15

Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn  
20 25 30

Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
35 40

<210> 319

<211> 41

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 319

Glu Leu Ser Asn Ile Lys Glu Asn Lys Cys Asn Gly Thr Asp Ala  
1 5 10 15

Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala  
20 25 30

Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
35 40

<210> 320

<211> 40

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 320

Leu Ser Asn Ile Lys Glu Asn Lys Cys Asn Gly Thr Asp Ala Lys  
1 5 10 15

Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val  
20 25 30

Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
35 40

<210> 321

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 321

Ser Asn Ile Lys Glu Asn Lys Cys Asn Gly Thr Asp Ala Lys Val  
1 5 10 15

Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr  
20 25 30

Glu Leu Gln Leu Leu Met Gln Ser Thr  
35

<210> 322

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 322

Asn Ile Lys Glu Asn Lys Cys Asn Gly Thr Asp Ala Lys Val Lys  
1 5 10 15

Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu  
20 25 30

Leu Gln Leu Leu Met Gln Ser Thr  
35

<210> 323

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 323

Ile Lys Glu Asn Lys Cys Asn Gly Thr Asp Ala Lys Val Lys Leu  
1 5 10 15

Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu  
20 25 30

Gln Leu Leu Met Gln Ser Thr  
35

<210> 324

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 324

Lys Glu Asn Lys Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile  
1 5 10 15

Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln  
20 25 30

Leu Leu Met Gln Ser Thr  
35

<210> 325

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 325

Asn Lys Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln  
1 5 10 15

Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu  
20 25 30

Met Gln Ser Thr

<210> 326

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 326

Lys Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu  
1 5 10 15

Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met  
20 25 30

Gln Ser Thr

<210> 327

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 327

Cys	Asn	Gly	Thr	Asp	Ala	Lys	Val	Lys	Leu	Ile	Lys	Gln	Glu	Leu
1				5					10					15

Asp	Lys	Tyr	Lys	Asn	Ala	Val	Thr	Glu	Leu	Gln	Leu	Leu	Met	Gln
				20					25					30

Ser Thr

<210> 328

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 328

Asn	Gly	Thr	Asp	Ala	Lys	Val	Lys	Leu	Ile	Lys	Gln	Glu	Leu	Asp
1				5					10					15

Lys	Tyr	Lys	Asn	Ala	Val	Thr	Glu	Leu	Gln	Leu	Leu	Met	Gln	Ser
				20					25					30

Thr

<210> 329

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 329

Gly	Thr	Asp	Ala	Lys	Val	Lys	Leu	Ile	Lys	Gln	Glu	Leu	Asp	Lys
1				5					10					15

Tyr	Lys	Asn	Ala	Val	Thr	Glu	Leu	Gln	Leu	Leu	Met	Gln	Ser	Thr
				20					25					30

<210> 330

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic

peptide

<400> 330

Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr  
1 5 10 15

Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
20 25

<210> 331

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 331

Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys  
1 5 10 15

Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
20 25

<210> 332

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 332

Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn  
1 5 10 15

Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
20 25

<210> 333

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 333

Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala  
1 5 10 15



Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
20 25

<210> 334  
<211> 25  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 334  
Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val  
1 5 10 15

Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
20 25

<210> 335  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 335  
Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr  
1 5 10 15

Glu Leu Gln Leu Leu Met Gln Ser Thr  
20

<210> 336  
<211> 23  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 336  
Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu  
1 5 10 15

Leu Gln Leu Leu Met Gln Ser Thr  
20

<210> 337  
<211> 22

<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 337  
Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu  
1 5 10 15  
Gln Leu Leu Met Gln Ser Thr  
20

<210> 338  
<211> 21  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 338  
Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln  
1 5 10 15  
Leu Leu Met Gln Ser Thr  
20

<210> 339  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 339  
Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu  
1 5 10 15  
Leu Met Gln Ser Thr  
20

<210> 340  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 340  
Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu  
1 5 10 15

Met Gln Ser Thr

<210> 341  
<211> 18  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 341  
Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met  
1 5 10 15

Gln Ser Thr

<210> 342  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 342  
Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln  
1 5 10 15

Ser Thr

<210> 343  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 343  
Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
1 5 10 15

<210> 344  
<211> 15  
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 344

Tyr	Lys	Asn	Ala	Val	Thr	Glu	Leu	Gln	Leu	Leu	Met	Gln	Ser	Thr
1				5				10						15

<210> 345

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 345

Lys	Asn	Ala	Val	Thr	Glu	Leu	Gln	Leu	Leu	Met	Gln	Ser	Thr
1				5				10					

<210> 346

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 346

Asn	Ala	Val	Thr	Glu	Leu	Gln	Leu	Leu	Met	Gln	Ser	Thr
1				5				10				

<210> 347

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 347

Ala	Val	Thr	Glu	Leu	Gln	Leu	Leu	Met	Gln	Ser	Thr
1				5				10			

<210> 348

<211> 11

<212> PRT

<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 348  
Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
1 5 10

<210> 349  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 349  
Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
1 5 10

<210> 350  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 350  
Glu Leu Gln Leu Leu Met Gln Ser Thr  
1 5

<210> 351  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 351  
Leu Gln Leu Leu Met Gln Ser Thr  
1 5

<210> 352  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide  
  
 <400> 352  
 Gln Leu Leu Met Gln Ser Thr  
     1                    5  
  
 <210> 353  
 <211> 6  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic peptide  
  
 <400> 353  
 Leu Leu Met Gln Ser Thr  
     1                    5  
  
 <210> 354  
 <211> 37  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic peptide  
  
 <400> 354  
 Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
     1                    5                    10                    15  
  
 Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile  
                     20                    25                    30  
  
 Arg Lys Ser Asp Glu Leu Leu  
                     35  
  
 <210> 355  
 <211> 36  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic peptide  
  
 <400> 355  
 Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
     1                    5                    10                    15  
  
 Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile

20

25

30

Arg Lys Ser Asp Glu Leu  
35

&lt;210&gt; 356

&lt;211&gt; 35

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: synthetic  
peptide

&lt;400&gt; 356

Phe	Tyr	Asp	Pro	Leu	Val	Phe	Pro	Ser	Asp	Glu	Phe	Asp	Ala	Ser
1				5					10					15

Ile	Ser	Gln	Val	Asn	Glu	Lys	Ile	Asn	Gln	Ser	Leu	Ala	Phe	Ile
			20					25						30

Arg Lys Ser Asp Glu  
35

&lt;210&gt; 357

&lt;211&gt; 34

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: synthetic  
peptide

&lt;400&gt; 357

Phe	Tyr	Asp	Pro	Leu	Val	Phe	Pro	Ser	Asp	Glu	Phe	Asp	Ala	Ser
1				5					10					15

Ile	Ser	Gln	Val	Asn	Glu	Lys	Ile	Asn	Gln	Ser	Leu	Ala	Phe	Ile
			20					25						30

Arg Lys Ser Asp

&lt;210&gt; 358

&lt;211&gt; 33

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: synthetic  
peptide

&lt;400&gt; 358

Phe	Tyr	Asp	Pro	Leu	Val	Phe	Pro	Ser	Asp	Glu	Phe	Asp	Ala	Ser
1				5					10					15

Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile  
20 25 30

Arg Lys Ser

<210> 359  
<211> 32  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 359  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile  
20 25 30

Arg Lys

<210> 360  
<211> 31  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 360  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile  
20 25 30

Arg

<210> 361  
<211> 30  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 361  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15



Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile  
20 25 30

<210> 362

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 362

Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe  
20 25

<210> 363

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 363

Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala  
20 25

<210> 364

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 364

Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu  
20 25

<210> 365

<211> 26  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 365  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser  
20 25

<210> 366  
<211> 25  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 366  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu Lys Ile Asn Gln  
20 25

<210> 367  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 367  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu Lys Ile Asn  
20

<210> 368  
<211> 23  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic

peptide

<400> 368

Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu Lys Ile  
20

<210> 369

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 369

Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu Lys  
20

<210> 370

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 370

Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu  
20

<210> 371

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 371

Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn  
20

<210> 372  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 372  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val

<210> 373  
<211> 18  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 373  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln

<210> 374  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 374  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser

<210> 375  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide  
 <400> 375  
 Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
 1 5 10 15  
 Ile

<210> 376  
 <211> 15  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide  
 <400> 376  
 Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
 1 5 10 15

<210> 377  
 <211> 14  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide  
 <400> 377  
 Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala  
 1 5 10

<210> 378  
 <211> 13  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide  
 <400> 378  
 Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp  
 1 5 10

<210> 379  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic peptide

<400> 379  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe  
1 5 10

<210> 380  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic peptide

<400> 380  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu  
1 5 10

<210> 381  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic peptide

<400> 381  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp  
1 5 10

<210> 382  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic peptide

<400> 382  
Phe Tyr Asp Pro Leu Val Phe Pro Ser  
1 5

<210> 383  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 383  
Phe Tyr Asp Pro Leu Val Phe Pro  
1 5

<210> 384  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 384  
Phe Tyr Asp Pro Leu Val Phe  
1 5

<210> 385  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 385  
Phe Tyr Asp Pro Leu Val  
1 5

<210> 386  
<211> 36  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 386  
Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser Ile  
1 5 10 15

Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg  
20 25 30

Lys Ser Asp Glu Leu Leu  
35

<210> 387  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 387  
Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser Ile Ser  
1 5 10 15  
Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys  
20 25 30  
Ser Asp Glu Leu Leu  
35

<210> 388  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 388  
Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser Ile Ser Gln  
1 5 10 15  
Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser  
20 25 30  
Asp Glu Leu Leu

<210> 389  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 389  
Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser Ile Ser Gln Val  
1 5 10 15  
Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp  
20 25 30  
Glu Leu Leu



<210> 390  
<211> 32  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 390  
Val Phe Pro Ser Asp Glu Phe Asp Ala Ser Ile Ser Gln Val Asn  
1 5 10 15  
Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu  
20 25 30

Leu Leu

<210> 391  
<211> 31  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 391  
Phe Pro Ser Asp Glu Phe Asp Ala Ser Ile Ser Gln Val Asn Glu  
1 5 10 15  
Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
20 25 30

<210> 392  
<211> 30  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 392  
Pro Ser Asp Glu Phe Asp Ala Ser Ile Ser Gln Val Asn Glu Lys  
1 5 10 15  
Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
20 25 30

<210> 393  
<211> 29  
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 393

Ser	Asp	Glu	Phe	Asp	Ala	Ser	Ile	Ser	Gln	Val	Asn	Glu	Lys	Ile
1				5				10					15	

Asn	Gln	Ser	Leu	Ala	Phe	Ile	Arg	Lys	Ser	Asp	Glu	Leu	Leu
			20					25					

<210> 394

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 394

Asp	Glu	Phe	Asp	Ala	Ser	Ile	Ser	Gln	Val	Asn	Glu	Lys	Ile	Asn
1				5				10					15	

Gln	Ser	Leu	Ala	Phe	Ile	Arg	Lys	Ser	Asp	Glu	Leu	Leu
			20					25				

<210> 395

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 395

Glu	Phe	Asp	Ala	Ser	Ile	Ser	Gln	Val	Asn	Glu	Lys	Ile	Asn	Gln
1				5				10					15	

Ser	Leu	Ala	Phe	Ile	Arg	Lys	Ser	Asp	Glu	Leu	Leu
			20					25			

<210> 396

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 396  
Phe Asp Ala Ser Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser  
1 5 10 15

Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
20 25

<210> 397  
<211> 25  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 397  
Asp Ala Ser Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu  
1 5 10 15

Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
20 25

<210> 398  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 398  
Ala Ser Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala  
1 5 10 15

Phe Ile Arg Lys Ser Asp Glu Leu Leu  
20

<210> 399  
<211> 23  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 399  
Ser Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe  
1 5 10 15

Ile Arg Lys Ser Asp Glu Leu Leu  
20

<210> 400  
<211> 22  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 400  
Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile  
1 5 10 15  
Arg Lys Ser Asp Glu Leu Leu  
20

<210> 401  
<211> 21  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 401  
Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg  
1 5 10 15  
Lys Ser Asp Glu Leu Leu  
20

<210> 402  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 402  
Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys  
1 5 10 15  
Ser Asp Glu Leu Leu  
20

<210> 403  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 403

Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser  
1 5 10 15

Asp Glu Leu Leu

<210> 404

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 404

Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp  
1 5 10 15

Glu Leu Leu

<210> 405

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 405

Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu  
1 5 10 15

Leu Leu

<210> 406

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 406

Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
1 5 10 15

<210> 407  
 <211> 15  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
           peptide  
  
 <400> 407  
 Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
   1                  5                  10                  15

<210> 408  
 <211> 14  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
           peptide  
  
 <400> 408  
 Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
   1                  5                  10

<210> 409  
 <211> 13  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
           peptide  
  
 <400> 409  
 Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
   1                  5                  10

<210> 410  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
           peptide  
  
 <400> 410  
 Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
   1                  5                  10

<210> 411  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 411  
Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
1 5 10

<210> 412  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 412  
Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
1 5 10

<210> 413  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 413  
Phe Ile Arg Lys Ser Asp Glu Leu Leu  
1 5

<210> 414  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 414  
Ile Arg Lys Ser Asp Glu Leu Leu  
1 5

<210> 415

<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 415  
Arg Lys Ser Asp Glu Leu Leu  
1 5

<210> 416  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 416  
Lys Ser Asp Glu Leu Leu  
1 5

<210> 417  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 417  
Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu  
20 25 30

Trp Ile Arg Arg Ser  
35

<210> 418  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 418



Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu  
20 25 30

Trp Ile Arg Arg

<210> 419

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 419

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu  
20 25 30

Trp Ile Arg

<210> 420

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 420

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu  
20 25 30

Trp Ile

<210> 421

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 421

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu  
20 25 30

Trp

<210> 422

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 422

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu  
20 25 30

<210> 423

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 423

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys  
20 25

<210> 424

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 424

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser

<210> 425  
<211> 27  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 425  
Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15  
Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu  
20 25

<210> 426  
<211> 26  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 426  
Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15  
Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu  
20 25

<210> 427  
<211> 25  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 427  
Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15  
Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu  
20 25

<210> 428  
<211> 24  
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 428

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala Lys Ser Asp  
20

<210> 429

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 429

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala Lys Ser  
20

<210> 430

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 430

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala Lys  
20

<210> 431

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 431  
Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala  
20

<210> 432  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 432  
Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys  
20

<210> 433  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 433  
Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn

<210> 434  
<211> 18  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 434  
Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu

<210> 435  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 435  
Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu

<210> 436  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 436  
Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile

<210> 437  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 437  
Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

<210> 438  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 438  
Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile

1

5

10

&lt;210&gt; 439

&lt;211&gt; 13

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: synthetic peptide

&lt;400&gt; 439

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp

1

5

10

&lt;210&gt; 440

&lt;211&gt; 12

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: synthetic peptide

&lt;400&gt; 440

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile

1

5

10

&lt;210&gt; 441

&lt;211&gt; 11

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: synthetic peptide

&lt;400&gt; 441

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro

1

5

10

&lt;210&gt; 442

&lt;211&gt; 10

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: synthetic peptide

&lt;400&gt; 442

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp

1

5

10

<210> 443  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 443  
Ile Thr Leu Asn Asn Ser Val Ala Leu  
1 5

<210> 444  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 444  
Ile Thr Leu Asn Asn Ser Val Ala  
1 5

<210> 445  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 445  
Ile Thr Leu Asn Asn Ser Val  
1 5

<210> 446  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 446  
Ile Thr Leu Asn Asn Ser  
1 5



<210> 447  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 447  
Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile  
1 5 10 15  
Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp  
20 25 30  
Ile Arg Arg Ser

<210> 448  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 448  
Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu  
1 5 10 15  
Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile  
20 25 30  
Arg Arg Ser

<210> 449  
<211> 32  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 449  
Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu  
1 5 10 15  
Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg  
20 25 30  
Arg Ser

<210> 450  
<211> 31  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 450  
Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn  
1 5 10 15  
Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg  
20 25 30

Ser

<210> 451  
<211> 30  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 451  
Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys  
1 5 10 15  
Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
20 25 30

<210> 452  
<211> 29  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 452  
Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala  
1 5 10 15  
Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
20 25

<210> 453  
<211> 28  
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 453

Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys  
1 5 10 15

Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
20 25

<210> 454

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 454

Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser  
1 5 10 15

Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
20 25

<210> 455

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 455

Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp  
1 5 10 15

Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
20 25

<210> 456

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 456  
Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu  
1 5 10 15

Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
20 25

<210> 457  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 457  
Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu  
1 5 10 15

Glu Ser Lys Glu Trp Ile Arg Arg Ser  
20

<210> 458  
<211> 23  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 458  
Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu  
1 5 10 15

Ser Lys Glu Trp Ile Arg Arg Ser  
20

<210> 459  
<211> 22  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 459  
Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser  
1 5 10 15

Lys Glu Trp Ile Arg Arg Ser  
20

<210> 460  
<211> 21  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 460  
Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys  
1 5 10 15  
Glu Trp Ile Arg Arg Ser  
20

<210> 461  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 461  
Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu  
1 5 10 15  
Trp Ile Arg Arg Ser  
20

<210> 462  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 462  
Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp  
1 5 10 15  
Ile Arg Arg Ser

<210> 463  
<211> 18  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 463

Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile  
1 5 10 15

Arg Arg Ser

<210> 464

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 464

Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg  
1 5 10 15

Arg Ser

<210> 465

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 465

Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
1 5 10 15

<210> 466

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 466

Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
1 5 10 15

<210> 467

<211> 14

<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 467

Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
1 5 10

<210> 468

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 468

Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
1 5 10

<210> 469

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 469

Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
1 5 10

<210> 470

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 470

Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
1 5 10

<210> 471

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 471

Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
1 5 10

<210> 472

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 472

Glu Ser Lys Glu Trp Ile Arg Arg Ser  
1 5

<210> 473

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 473

Ser Lys Glu Trp Ile Arg Arg Ser  
1 5

<210> 474

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 474

Lys Glu Trp Ile Arg Arg Ser  
1 5

<210> 475

<211> 6

<212> PRT

<213> Artificial Sequence



<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 475

Glu Trp Ile Arg Arg Ser  
1 5

<210> 476

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 476

Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys  
20 25 30

Glu Ala Ile Arg

<210> 477

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 477

Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys  
20 25 30

Glu Ala Ile

<210> 478

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 478  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys  
20 25 30

Glu Ala

<210> 479  
<211> 31  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 479  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys  
20 25 30

Glu

<210> 480  
<211> 30  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 480  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys  
20 25 30

<210> 481  
<211> 29  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 481  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala

1	5	10	15
Leu	Val	Glu	Ala
Lys	Gln	Ala	Arg
Ser	Asp	Ile	Glu
Lys	Leu		
20	25		

<210> 482  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 482
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala
1 5 10 15

Leu	Val	Glu	Ala
Lys	Gln	Ala	Arg
Ser	Asp	Ile	Glu
Lys			
20	25		

<210> 483  
 <211> 27  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 483
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala
1 5 10 15

Leu	Val	Glu	Ala
Lys	Gln	Ala	Arg
Ser	Asp	Ile	Glu
20	25		

<210> 484  
 <211> 26  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 484
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala
1 5 10 15

Leu	Val	Glu	Ala
Lys	Gln	Ala	Arg
Ser	Asp	Ile	
20	25		

<210> 485  
<211> 25  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 485  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15  
Leu Val Glu Ala Lys Gln Ala Arg Ser Asp  
20 25

<210> 486  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 486  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15  
Leu Val Glu Ala Lys Gln Ala Arg Ser  
20

<210> 487  
<211> 23  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 487  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15  
Leu Val Glu Ala Lys Gln Ala Arg  
20

<210> 488  
<211> 22  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 488

Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

Leu Val Glu Ala Lys Gln Ala  
20

<210> 489

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 489

Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

Leu Val Glu Ala Lys Gln  
20

<210> 490

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 490

Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

Leu Val Glu Ala Lys  
20

<210> 491

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 491

Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

Leu Val Glu Ala

<210> 492  
<211> 18  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 492  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

Leu Val Glu

<210> 493  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 493  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

Leu Val

<210> 494  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 494  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

Leu

<210> 495  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 495  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

<210> 496  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 496  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val  
1 5 10

<210> 497  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 497  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala  
1 5 10

<210> 498  
<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 498  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala  
1 5 10

<210> 499  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 499

Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr  
1 5 10

<210> 500

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 500

Ala Leu Gly Val Ala Thr Ser Ala Gln Ile  
1 5 10

<210> 501

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 501

Ala Leu Gly Val Ala Thr Ser Ala Gln  
1 5

<210> 502

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 502

Ala Leu Gly Val Ala Thr Ser Ala  
1 5

<210> 503

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic



peptide

<400> 503

Ala Leu Gly Val Ala Thr Ser  
1 5

<210> 504

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 504

Ala Leu Gly Val Ala Thr  
1 5

<210> 505

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 505

Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala Leu  
1 5 10 15

Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu  
20 25 30

Ala Ile Arg Asp

<210> 506

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 506

Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala Leu Val  
1 5 10 15

Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala  
20 25 30

Ile Arg Asp

<210> 507  
<211> 32  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 507  
Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala Leu Val Glu  
1 5 10 15  
Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile  
20 25 30

Arg Asp

<210> 508  
<211> 31  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 508  
Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala Leu Val Glu Ala  
1 5 10 15  
Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
20 25 30

<210> 509  
<211> 30  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 509  
Thr Ser Ala Gln Ile Thr Ala Ala Val Ala Leu Val Glu Ala Lys  
1 5 10 15  
Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
20 25 30

<210> 510  
<211> 29

<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 510

Ser Ala Gln Ile Thr Ala Ala Val Ala Leu Val Glu Ala Lys Gln  
1 5 10 15

Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
20 25

<210> 511

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 511

Ala Gln Ile Thr Ala Ala Val Ala Leu Val Glu Ala Lys Gln Ala  
1 5 10 15

Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
20 25

<210> 512

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 512

Gln Ile Thr Ala Ala Val Ala Leu Val Glu Ala Lys Gln Ala Arg  
1 5 10 15

Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
20 25

<210> 513

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 513  
Ile Thr Ala Ala Val Ala Leu Val Glu Ala Lys Gln Ala Arg Ser  
1 5 10 15

Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
20 25

<210> 514  
<211> 25  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 514  
Thr Ala Ala Val Ala Leu Val Glu Ala Lys Gln Ala Arg Ser Asp  
1 5 10 15

Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
20 25

<210> 515  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 515  
Ala Ala Val Ala Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile  
1 5 10 15

Glu Lys Leu Lys Glu Ala Ile Arg Asp  
20

<210> 516  
<211> 23  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 516  
Ala Val Ala Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu  
1 5 10 15

Lys Leu Lys Glu Ala Ile Arg Asp

<210> 517  
 <211> 22  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 517  
 Val Ala Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys  
   1                  5                  10                  15  
 Leu Lys Glu Ala Ile Arg Asp  
                   20

<210> 518  
 <211> 21  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 518  
 Ala Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu  
   1                  5                  10                  15  
 Lys Glu Ala Ile Arg Asp  
                   20

<210> 519  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 519  
 Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys  
   1                  5                  10                  15  
 Glu Ala Ile Arg Asp  
                   20

<210> 520  
 <211> 19  
 <212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 520

Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu  
1 5 10 15

Ala Ile Arg Asp

<210> 521

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 521

Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala  
1 5 10 15

Ile Arg Asp

<210> 522

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 522

Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile  
1 5 10 15

Arg Asp

<210> 523

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 523

Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
1 5 10 15

<210> 524  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 524  
Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
1 5 10 15

<210> 525  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 525  
Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
1 5 10

<210> 526  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 526  
Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
1 5 10

<210> 527  
<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 527  
Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
1 5 10

<210> 528  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 528  
Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
1 5 10

<210> 529  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 529  
Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
1 5 10

<210> 530  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 530  
Glu Lys Leu Lys Glu Ala Ile Arg Asp  
1 5

<210> 531  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 531  
Lys Leu Lys Glu Ala Ile Arg Asp  
1 5



<210> 532  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 532  
Leu Lys Glu Ala Ile Arg Asp  
1 5

<210> 533  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 533  
Lys Glu Ala Ile Arg Asp  
1 5

<210> 534  
<211> 36  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 534  
Tyr Thr Gly Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15  
Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30  
Trp Asn Trp Phe  
35

<210> 535  
<211> 36  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 535

Tyr Thr Asn Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn Trp Phe  
35

<210> 536

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 536

Tyr Thr Ser Ile Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn Trp Phe  
35

<210> 537

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 537

Tyr Thr Ser Leu Ile Tyr Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn Trp Phe  
35

<210> 538

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 538

Tyr Thr Ser Leu Ile His Arg Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn Trp Phe  
35

<210> 539

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 539

Tyr Thr Ser Leu Ile His Asn Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn Trp Phe  
35

<210> 540

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 540

Tyr Thr Ser Leu Ile His Thr Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn Trp Phe  
35

<210> 541  
<211> 36  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 541  
Tyr Thr Ser Leu Ile His Ser Leu Leu Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15  
Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30  
Trp Asn Trp Phe  
35

<210> 542  
<211> 38  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 542  
Ser Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30  
Arg Tyr Leu Lys Asp Gln  
35

<210> 543  
<211> 38  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 543  
Asn Asn Leu Leu Arg Ala Ile Asp Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu

20

25

30

Arg Tyr Leu Lys Asp Gln  
35

&lt;210&gt; 544

&lt;211&gt; 38

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: synthetic  
peptide

&lt;400&gt; 544

Asn Asn Leu Leu Arg Ala Ile Gln Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30

Arg Tyr Leu Lys Asp Gln  
35

&lt;210&gt; 545

&lt;211&gt; 38

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: synthetic  
peptide

&lt;400&gt; 545

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Met Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30

Arg Tyr Leu Lys Asp Gln  
35